

REMARKS

Claims 1-20 were presented for examination in the present application and remain pending upon entry of the instant amendment.

The original Abstract was objected to for failing to comply with MPEP 608.01(b). A replacement Abstract has been presented to address the objection. Reconsideration and withdrawal of the objection are requested.

Claims 1-14 and 16-20 were rejected under 35 U.S.C. §102(b) over DE 19920299 (Rumpler) – English equivalent U.S. Patent No. 6,711,713. Claims 1, 2, 11 and 15 were rejected under 35 U.S.C. §102(b) over U.S. Patent No. 4,652,776 (George).

Claim 1 requires “detecting two or more process signals redundantly; identifying an event that is relevant to system safety; and converting said process signals to a single process signal for further system-based processing”

Claim 11 requires “a plurality of process signals being supplied on two or more channels and detected redundantly for system safety; and a converter for conversion of process signals to a single process signal, said single process signal being capable of being transmitted via one channel.”

Rumpler provides “safety-relevant signals are physically detected on at least two channels at the transmitter end, the detected data are logically transmitted by at least two channels using a safety technique by radio to a receiver end, and the received data are likewise physically processed and monitored on at least two channels at the receiver end . . . [and that] the detection means for safety-related signals are designed physically with at least two channels at a transmitter end, a radio path which logically has at least two channels and uses a safe technology is provided with in each case one

radio module at the transmitter end and receiver end, and the signal processing means at the receiver end are likewise designed physically with at least two channels." See col. 2, lines 15-35.

Applicants traverse the assertion that Rumpler anticipates all the limitations of claims 1 and 11.

The Office Action submits that col. 6, lines 6-11 and lines 20-22 of Rumpler discloses the step of converting the process signals to a single process signal for further system-based processing. However, this passage of Rumpler must be read in the context of the entire disclosure. When read out of context this passage could be improperly construed to disclose converting the process signals to a single process signal.

When read in context it is apparent that Rumpler does not process signals to a single process signal. It is implicitly disclosed in col. 6, lines 12-18 that the reception processor monitors the data for channel K2 and the data for channel K1 as the data from those two channels is transferred and monitored by reception processor P1. Furthermore, col. 6, lines 20-22 relate to Fig. 2, however, lines 31-32 explicitly disclose that Fig. 2 shows the data for a transmission channel K1 or K2.

Moreover, Rumpler discloses that at the detection side, a plurality of process signals is detected and supplied to first and second detection units, whereby the first detection unit is associated with a first channel that output signals are passed. The second detection unit is associated with a second channel and hence, there is more than a single process signal.

The data is transmitted via a radio link and split again into two channels. See col. 5, lines 1-15. Two redundantly detected process signals are each passed to, and processed by, different detection units. See Fig. 1; Fig. 4; col. 5, lines 33-50. The data sequence in which data from the radio message in the form of two logic links is shown

in Fig. 3. A radio protocol is followed by an element for the first channel, then an element for the second channel (See col. 6, lines 54-67), where each of these elements is split off the data packet combining the data of the respective channel. (See col. 6, lines 19-36).

Thus, throughout the transmission path redundantly detected process signals are not converted to a single process signal. Therefore, all the limitations of claims 1 and 11 are not disclosed or suggested by Rumpler, and claims 1 and 11 are novel and are in condition for allowance. Reconsideration and withdrawal is requested.

Since claims 2-10 and 12-20 depend from the aforementioned claims 1 and 11, respectively, those claims are also believed to be in condition for allowance. Thus, reconsideration and withdrawal of the rejections of claims 1-20 are requested.

Claims 1, 2, 11 and 15 were rejected under 35 U.S.C. §102(b) over U.S. Patent No. 4,652,776 (George).

Claim 1 requires "detecting two or more process signals redundantly; identifying an event that is relevant to system safety; and converting said process signals to a single process signal for further system-based processing"

Claim 11 requires "a plurality of process signals being supplied on two or more channels and detected redundantly for system safety; and a converter for conversion of process signals to a single process signal, said single process signal being capable of being transmitted via one channel."

George provides "an interlocking system comprising three parallel interlocking processors which operate to produce serial control signal outputs in parallel. The outputs are serially multiplexed signals, where the output of processor 20 is nominated as the preferred system output, the processor 22 is designated as the hot standby to be used to provide system output in the event that processor 20 faults or is disqualified,

and processor 21 is used purely in a checking procedure. The processors are interconnected and exchange outputs to determine if output of processor 20 is correct. The output of processor 20 is received by circuits 24a and 24b, and the output of processor 22 is received by circuit 25a and 25b. The selected serial output is circulated to a multiplicity of data output cards which are divided into two types 26a and 26b providing data output information, and 27a and 27b providing a data output "control" output."

George discloses a processing path the never converts two or more process signals to a single process signal. Assuming *arguendo* that processors 20, 21 and 22 produce redundantly detected process signals, the multiple process signals are processed by means of a complex processing circuitry resulting in a plurality of further signals, and the "redundant process signals" are not converted to a signal process signal. The selected serial output from output processors (20, 21 or 22) is circulated on a data highway in a housing to a multiplicity of data output cards which are divided into two types: 26a and 26b, and 27a and 27b. See col. 3, lines 17-30. Cards 26a and 26b provide a data output "information signal, and Cards 27a and 27b provide a data output "control" output. See col. 3, lines 25-28.

Thus, the process signals from processors 20, 21 and 22 that the examiner has deemed to be redundantly processed are not converted to a single process signal, but the "redundant processed signal" in George is converted to multiple signals. See col.3, lines 2-45. Throughout the processing path "redundantly detected process signals" are not converted to a single process signal. The passages from George referenced in the Office Action are misleading when taken out of context, but when the referenced is considered in total, it is clear that George teaches away from the claimed invention.

The invention recited in claims 1 and 11 provides a method and system that can provide the transmission of safe process information, where two or more process signals are detected redundantly in order to identify an event that is relevant to system safety, the process signals are converted to a single process signal for further system-

based processing. This ensures that there is a substantially smaller amount of data to be transmitted, and consequently to be further processed, for the same overall information content.

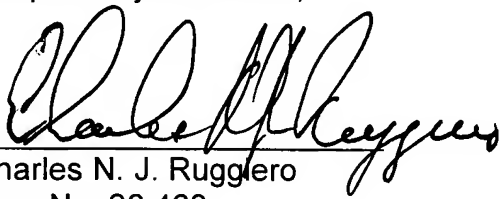
Therefore all the limitations of claims 1 and 11 are not disclosed or suggested. Claims 1 and 11 are in condition for allowance. Reconsideration and withdrawal are requested.

Since claims 2 and 15 depend from the aforementioned claims 1 and 11, respectively, those claims are also believed to be in condition for allowance. Reconsideration and withdrawal are requested.

In view of the above, it is respectfully submitted that the present application is in condition for allowance. Such action is solicited. If for any reason the Examiner feels that consultation with Applicants' attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below.

Respectfully submitted,

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